the summer (June and July), with one of them having a very short fruiting season (*Pseudoplectania sphagnicola*). Two taxa (*Arrhenia sphagnicola* and *A. onisca*) were recorded only in June and July, while other taxa more or less continuously fruited until the end of the growing season. Eleven taxa were recorded only in late summer (August and September).

Here we present the first year data of a long–term monitoring program on macromycete fruiting dynamics from two bog plant communities (treed and lawns). Our data show that the abundance of carpophores appears to be correlated to environmental and climatic data, particularly air temperature and precipitation. While these relationships are tentative and purely descriptive at this time, additional data from future years will facilitate the use of robust statistical approaches to elucidate the precise relationship of macromycete carpophore dynamics to environmental data.

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APHYLLOPHOROID FUNGA OF YENISEI MERIDIAN (CENTRAL SIBERIA): FIRST APPROXIMATION IN LATITUDINAL GRADIENT

In Northern Eurasia (western and eastern Europe, the Urals), the species richness of aphyllophoroid fungi, is relatively well studied, whereas the vast territory of Siberia is still a mycological «white spot». Nevertheless, big amount of information was collected from the West Siberia during the last decade, and regular expeditions have enlarged the knowledge also from Eastern and Southern Siberia [2].

The study of aphyllophoroid fungi of the Yenisei's meridian (Central Siberian longitudinal sector) has a long history. The International Transsiberian Mycological Expeditions started already in 1992, and these expeditions greatly enlarged the basic knowledge of fungi. Much useful material was collected by the Krasnoyarsk mycological group (M. I. Beglyanova, N. P. Kutafjeva, A. L. Javorsky, V. V. Astapenko, I. N. Pavlov, O. E. Kruchkova, A. P. Kosheleva et al.). This is the first attempt to make an approximation of the species richness and taxonomical structure in this area. This latitudinal transect is about 3300 km long and includes ten zonal mycobiotas from the Northern Zemlya Isles and Taimyr Peninsula with arctic desert vegetation till the sandy dunes and (semi)deserts in Tuva Republic at the Yenisei riverhead (the Uvs-Nuur lake surrounds). For the analyses mostly zonal habitats were used (with river valley vegetation), but extrazonal variants, like altitudinal belts of the Sayan Mountains were excluded.

In general, 557 species of aphyllophoroid fungi (except heterobasidioid and pleurotoid groups) have been collected or mentioned in the literature. Nowadays, the middle boreal subzone is the best studied (406 species), followed by arctic deserts (7), tundra (49), forest-tundra (161) and forest-steppe (302) if compare with over well studied regions [1, 3]. The southern boreal (376), hemiboreal (358) and steppe (95) subzones are less studied. The most weakly studied subzones are the northern boreal (188) and arid-deserts (incl. semideserts) (9).

Materials of fungi study do not allow us to consider the Yenisei Meridian a significant biogeographical line, as established for some groups of animals and plants. Funga of the tundra and taiga zone are relatively similar to the west and east of the Yenisei and primarily include widespread Holarctic species. That, however, needs further studies. On the other hand, our material demonstrates that the hemiboreal, and especially steppe and forest-steppe funga includes many species common both in the east and west (*Antrodia malicola*, *A. variiformis*, *Antrodiella faginea*, *Botryodontia millawensis*, *Clavaria asperulispora*, *C. greletii*, *Clavulinopsis umbrinella*, *Dendrothele commixta*, *Lenzites* cf. *acuta*, *Lindtneria trachyspora*, *Phellinus robustus*, *Peniophora versiformis*, *Ramaria flavicingula*, *R. rufescens*, *Trametes ljubarskyi*, etc.), like a bridge between the Manchurian and European nemoral forests.

Naturally the lists of species are far from complete, but they give hints of the characteristics of different climatic zones and vegetation gradients, and make it possible to compare, in some degree anyway, the Western and Eastern Siberian fungas [2]. All this information allows us to open a discussion on compilation of a «Check-list of Aphyllophoroid fungi of Siberia».

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МИКОБИОТА АФИЛЛОФОРОВЫХ ГРИБОВ ЕНИСЕЙСКОГО МЕРИДИАНА (СРЕДНЯЯ СИБИРЬ): ПЕРВЫЕ РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЙ В ШИРОТНОМ ГРАДИЕНТЕ

Многолетние исследования афиллофоровых грибов Средней Сибири впервые позволили составить единый список видов региона, ранжированный их в широтно-зональном градиенте. На данный момент в Средней Сибири выявлено 557 видов афиллофоровых грибов.

Наиболее хорошо изучен список тундровых, лесотундровых, средне-, южно- и подтаежных экосистем, тогда как северотаежные и пустынные – требуют дополнительных исследований. Несомненно, данный результат не итоговый, а будет корректироваться вместе с поступающими новыми данными.

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DIVERSITY AND ECOLOGY OF APHYLLOPHOROID FUNGI IN THE ARCHIPELAGO FORESTS OF THE BALTIC SEA

The aim of this study was to find out diversity, biogeography and ecology of aphyllophoroid fungi in the insular forest habitats. The study area was located in the archipelago of the Finnish southwestern coast, in the Baltic Sea. The material was collected from 40 forested islands in the middle and outer archipelago zones. The total forest area of these islands were 1142 hectares (range 3–159 ha). The species group focus was on polypores, corticioids and hydnaceous wood decayers with the common feature to form basidiocarps on woody substrates.

The number of surveyed substrate units was determined according to size of the island so that each island had same sampling effort. Wood pieces ≥3 cm were considered and documented. In all, 10 127 dead trunks, stumps or fallen branches were inventoried and they were divided into tree species as follows: *Pinus sylvestris* 32.3 %, *Alnus glutinosa* 26.1 %, *Betula sp*. 20.1 %, *Picea abies* 9.6 %, *Populus tremula* 5.0 % and others 7.0 %.

Altogether 339 species or taxon were identified among the 8549 species records. It is 45 % of all known species of the target groups recorded in Finland. The proportion of polypores was 98 species. The genera with the highest species richness were: *Trechispora* 19, *Phellinus* 13 and *Tomentella* 11 species. The most numerous species were (number of separate substrate unit) *Inonotus radiatus* 939, *Stereum rugosum* 466, *Trichaptum abietinum* 333, *Piloderma fallax* 329, *Piptoporus betulinus* 320, *Fomes fomentarius* 318 and *Botryobasidium subcoronatum* 281 and *Peniophorella pubera* 218. On the other hand, 231 species had less than 10 records and 82 species were found only once.

Eight new species to Finland were found in this material: *Peniophorella tsugae*, *Phlebia cremeoalutacea*, *Tomentella albomarginata*, *Tomentella cinereoumbrina*, *Tomentella fuscocinerea*, *Trechispora araneosa*, *Tubulicium vermiferum* and *Tulasnella danica*. Up to 30 species had five or less earlier records in Finland. Several new and still undescribed species of aphyllophoroid fungi were found. The number of red–listed species was 16 and the number of old–growth forest indicator species was 17.

On average 0.84 record was done per surveyed substrate unit. *Salix caprea* had the highest hosting result with 1.2 record per wood piece, and the next ones were *Alnus glutinosa* (0.96), *Betula sp.* (0.95) and *Populus tremula* (0.92). In total, 70 % of all species records were made in decay stage 1–2. These two freshest decay stages covered 85 % of all found species. Fine woody debris (diameter 10cm) hosted only 21.3 % of all records, but as much as 61.9 % of all species.

The correlations between the environmental factors and the species richness and the number of records were tested. The forest area of islands had significant relation with the species richness and the number of records. Also the dead wood diversity index had significant relation with the species richness and the number of records. Surprisingly, the volume of dead wood had only slight relation to the polypore species richness and the number of polypore records. However, the study islands' distance to mainland or the number of cut stumps had no relation to the species richness or the number of records. The study islands with herb–rich forest as dominant forest type had on average more records than the islands with other dominant forest type. When comparing the means, the number of records varied significantly with the number of forest types per island.

